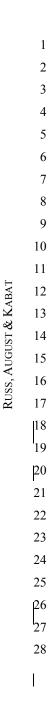
## Exhibit 2



RUSS, AUGUST & KABAT Marc A. Fenster, SBN 181067 Email: mfenster@raklaw.com Reza Mirzaie (CA SBN 246953) Email: rmirzaie@raklaw.com Brian D. Ledahl (CA SBN 186579) Email: bledahl@raklaw.com Paul Kroeger (CA SBN 229074) Email: pkroeger@raklaw.com C. Jay Chung (CA SBN 252794) Email: jchung@raklaw.com Philip X. Wang (CA SBN 262239) Email: pwang@raklaw.com 12424 Wilshire Boulevard, 12th Floor Los Angeles, California 90025 Telephone: (310) 826-7474 Facsimile: (310) 826-6991 Attorneys for Plaintiff

# UNITED STATES DISTRICT COURT CENTRAL DISTRICT OF CALIFORNIA SOUTHERN DIVISION

DATA SCAPE LIMITED,

Data Scape Limited

Case No. <u>8:18-cv-02285-DOC-KESx</u>

Plaintiff,

v

FIRST AMENDED COMPLAINT FOR PATENT INFRINGEMENT

WESTERN DIGITAL CORPORATION, WESTERN DIGITAL TECHNOLOGIES, INC.,

JURY TRIAL DEMANDED

Defendants.

FIRST AMENDED COMPLAINT FOR PATENT INFRINGEMENT

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FIRST AMENDED COMPLAINT

This is an action for patent infringement arising under the patent laws of the United States, 35 U.S.C. This Court has original subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338(a).

#### **PARTIES**

- 1. Data Scape Limited ("Data Scape" or "Plaintiff") is a company organized under the laws of Ireland with its office located at Office 115, 4-5 Burton Hall Road, Sandyford, Dublin 18, Ireland.
- 2. On information and belief, Western Digital Corporation is a Delaware corporation with a place of business at 3355 Michelson Drive, Suite 100, Irvine, California 92612.
- 3. On information and belief, Western Digital Technologies, Inc. is a Delaware corporation with a place of business at 3355 Michelson Drive, Suite 100, Irvine, California 92612. Western Digital Technologies, Inc. and Western Digital Corporation are collectively referred to as "Defendants" or "Western Digital."

#### **JURISDICTION AND VENUE**

- 4. This Court has personal jurisdiction over each Defendant in this action because each Defendant resides in the Central District of California and has committed acts within this district giving rise to this action and has established minimum contacts with this forum such that the exercise of jurisdiction would not offend traditional notions of fair play and substantial justice. Each Defendant, directly and through subsidiaries or intermediaries, has committed and continues to commit acts of infringement in this District by, among other things, offering to sell and selling products and/or services that infringe the asserted patents.
- 5. Venue is proper in this district under 28 U.S.C. § 1400(b). Each Defendant has transacted business in this district and has committed acts of direct and indirect infringement in this district. Each Defendant has a regular and established place of business in this District, including, e.g., its headquarters and principal place of business.

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### **ASSERTED PATENTS**

- Data Scape is the owner by assignment of United States Patent No. 8,386,581 ("the '581 Patent"), entitled "Communication System And Its Method and Communication Apparatus And Its Method." The '581 Patent was duly and legally issued by the United States Patent and Trademark Office on February 26, 2013. A true and correct copy of the '581 Patent is included as Exhibit A.
- Data Scape is the owner by assignment of United States Patent No. 7,720,929 ("the '929 Patent"), entitled "Communication System And Its Method and Communication Apparatus And Its Method." The '929 Patent was duly and legally issued by the United States Patent and Trademark Office on May 18, 2010. A true and correct copy of the '929 Patent is included as Exhibit B.
- 8. Data Scape is the owner by assignment of United States Patent No. 7,617,537 ("the '537 Patent"), entitled "Communication System And Its Method and Communication Apparatus And Its Method." The '537 Patent was duly and legally issued by the United States Patent and Trademark Office on November 10, 2009. A true and correct copy of the '537 Patent is included as Exhibit C.
- Data Scape is the owner by assignment of United States Patent No. 9,715,893 ("the '893 Patent"), entitled "Recording Apparatus, Server Apparatus, Recording Method, Program and Storage Medium." The '893 Patent was duly and legally issued by the United States Patent and Trademark Office on July 25, 2017. A true and correct copy of the '893 Patent is included as Exhibit D.
- 10. In addition to the factual allegations set forth below for each of the four Counts, the following are non-exhaustive list of fact-based claim constructions that confirm that the claimed solutions do not just cover any sort of selective transfer of digital data, but instead are more focused—and covers a technical species of selective-transfer techniques that enabled devices to automatically detect and

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transfer only some select data content files and not others. These constructions include the following ones:1

- a. management information: "digital data stored in a program file and configured to enable a controller to electronically locate, extract and/or transfer only select content data without transferring all content data."
- b. content data: "digital data useable to communicate the content or substance of a digital file, as opposed to its metadata"
- c. compare/comparing/comparison: "performing an electronic analysis of two sets of digital data stored in different apparatuses to determine the differences between them, if any"
- d. controller: "a sub-class of computer microprocessors designed to enable the transfer of digital data"
- e. without regard to the connection: "regardless of whether or not the identified apparatuses are currently connected"
- f. connected/connected: "electrically communicating via a wired or wireless connection"
- g. uniquely associate: "provide a one-to-one correlation using programmable code"
- h. detector: "an input and/or output computer interface designed to receive a predetermined digital signal indicating whether one apparatus is externally connected to any other apparatus"
- i. editor: "a sub-class of computer interface hardware and/or micro controllers designed to enable editing of digital data"
- storage medium: "an identifiable non-volatile computer memory for electronically storing data"

<sup>&</sup>lt;sup>1</sup> Data Scape reserves the right to modify these constructions, consistent with the practice of meeting and conferring that are typically in any claim construction proceedings.

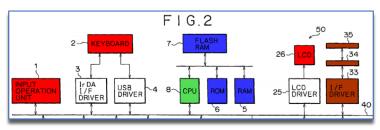
k. list: "a digital table, which is stored in a predetermined area in a storage medium and includes an identifier for each stored content data file"

#### **COUNT I**

#### **INFRINGEMENT OF U.S. PATENT NO. 8,386,581**

- 11. Plaintiff realleges and incorporates by reference the foregoing paragraphs, as if fully set forth herein.
- 12. Data Scape is the owner by assignment of United States Patent No. 8,386,581 ("the '581 Patent"), entitled "Communication System And Its Method and Communication Apparatus And Its Method." The '581 Patent was duly and legally issued by the United States Patent and Trademark Office on February 26, 2013. A true and correct copy of the '581 Patent is included as Exhibit A.
- 13. In their most basic form, and ignoring many claim limitations, the claims of the '581 Patent are directed to data synchronization system with a controller configured to uniquely associate an edited digital data list with an external apparatus using a unique identification of that external apparatus and selectively transfer certain digital content data registered in that list. The claims are not directed to abstract ideas. The claims provide technical solutions to technical problems, and, thus, are patent-eligible.
- 14. As the '581 Patent states, the inventor, Akihiro Morohashi, working at Sony Corporation, aimed to solve the problems skilled artisans in 1999 faced trying to selectively transfer digital data between two electronic apparatuses. *E.g.*, '581 Patent, Col. 1:37-2:49. For example, many used optical disks to accomplish this process, but that was "cumbersome" and did not enable easy or random selection of files to transfer. *Id.* And when others burned digital files into hard disk drives or semiconductor memory, those systems still required a large amount of time to selectively transfer certain digital data between electronic apparatuses. *Id.* And in any case, there was no reasonable way to selectively synchronize select digital content data between the apparatuses. *Id.* These problems were specific to the

technological process of selective digital-data transfer between electronic apparatuses. *Id.* And with 28 columns of text and 13 figures, including Figure 2 below, the inventors taught various technical solutions involving an unconventional server with a controller configured with circuitry to compare certain digital management information:



15. Enabled by these teachings, the '581 patent recites in its claims various technical solutions to the existing technological problems and shortcomings. For example, various claims require the then-unconventional system of electronic components configured to use certain digital "management information" to compare, edit, delete and/or selectively transfer separate digital content data between two identified apparatuses. *See, e.g.*, '581 Patent, Claim 1 ("[a] a storage unit configured to store content data to a storage medium; [b] a communication unit configured to communicate with an external apparatus; [c] a controller configured to edit a list so that content data is registered in the list, [d] to uniquely associate the list with the external apparatus using a unique identification of the external apparatus, [e] to extract the list associated with the external apparatus is connected to the communication apparatus, and [f] to control transferring of content data registered in the extracted list to the external apparatus.").

<u>16.</u> As such, the claims of the '581 patent generally relate, in their most basic form, and ignoring many claim limitations, to the concept of data synchronization as understood by a person of ordinary skill in the art. See, e.g.,

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https://www.techopedia.com/definition/1006/data-synchronization synchronization is the process of maintaining the consistency and uniformity of data instances across all consuming applications and storing devices. It ensures that the same copy or version of data is used in all devices - from source to destination."); https://www.pcmag.com/encyclopedia/term/40854/data-synchronization ("Keeping data in two or more electronic devices up-to-date so that each repository contains the identical information. Data in handheld devices and laptops often require synchronization with the data in a desktop machine or server."); https://en.wikipedia.org/wiki/Data synchronization ("Data synchronization is the process of establishing consistency among data from a source to a target data storage and vice versa and the continuous harmonization of the data over time.").

17. The '581 patent and its file history make clear that each included independent-claim limitations were not in the prior art, let alone well-understood, routine, and conventional. This includes the claimed [a] storage configured to store content data, [b] communication unit, [c] controller configured to edit a list so that content data is registered in the list, [d] controller configured to uniquely associate the list with the external apparatus, [e] controller configured to extract the list when the external apparatus is connected to the communication apparatus, and [f] controller configured to control transferring registered data. And the dependent claims also include limitations that were not in the prior art, let alone wellunderstood, routine, and conventional. See, e.g., limitations of claims 2-14 of the '581 patent.

18. For instance, Claim 1 of the '581 Patent recites:

1[pre]. A communication apparatus comprising:

[1a] a storage unit configured to store content data to a storage medium;

[1b] a communication unit configured to communicate with an external apparatus;

[1c] a controller configured to edit a list so that content data is registered in the list,

[1d] to uniquely associate the list with the external apparatus using a unique identification of the external apparatus,

[1e] to extract the list associated with the external apparatus from a plurality of lists in the communication apparatus when the external apparatus is connected to the communication apparatus, and

[1f] to control transferring of content data registered in the extracted list to the external apparatus.

- 19. The limitations highlighted above ("uniquely associate the list with the external apparatus using a unique identification of the external apparatus" and "to control transferring of content data registered in the extracted list to the external apparatus") is not found in the claims of the '929 Patent or the other patents asserted in this action.
- 20. Further, the file history confirms that these limitations were inventive over prior art and not well-understood, routine, and conventional. Specifically, after these limitations were added to the claims of the '581 Patent, the patent claims were allowed by the Examiner. *See* '581 File History, October 23, 2012, Notice of Allowance.
- 21. Likewise, the specification teaches that uniquely associating the list with external apparatus and transferring content data registered in the extracted list was inventive over the prior art, and not well-understood, routine, and conventional. *E.g.*, '581 Patent at 5:13-67, 7:16-8:27, 11:19-59, 14:9-67, 19:61-20:60, 21:7-62, 22:5-24:60.
- 22. Claim 1 of the '581 Patent does not claim a result, but instead specific technology using specific and non-conventional processes and machines, including:

A communication apparatus comprising:

a storage unit configured to store content data to a storage medium;

FIRST AMENDED COMPLAINT

1 a communication unit configured to communicate with an external 2 3 a controller configured to edit a list so that content data is registered in the 4 list, 5 to uniquely associate the list with the external apparatus using a unique identification of the external apparatus, 6 7 to extract the list associated with the external apparatus from a plurality of 8 lists in the communication apparatus when the external apparatus is connected 9 to the communication apparatus, and 10 to control transferring of content data registered in the extracted list to the 11 external apparatus. 12 23. Claim 1 is not representative of all claims of the '581 patent. For 13 example, it requires "controller" configured in specific ways, which is not required 14 in claim 15 of the '581 patent. Claim 15 recites: 15 A communication method comprising the steps of: 16 storing content data to a storage medium of a communication apparatus; 17 communicating said communication apparatus with an external apparatus; 18 editing a list stored at the communication apparatus so that content data is 19 registered in the list; 20 uniquely associating the list with the external apparatus using a unique 21 identification of the external apparatus; 22 extracting the list associated with the external apparatus from a plurality of 23 lists in the communication apparatus when the external apparatus is connected 24 to the communication apparatus; and 25 controlling transfer of content data registered in the extracted list to the 26 external apparatus. 27 28 FIRST AMENDED COMPLAINT

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- 24. Claim 15 does not claim a result. Instead, it recites specific steps for accomplishing a result (e.g., extracting a list associated with an external apparatus and controlling transfer of content data registered in the extracted list).
- 25. Dependent claims contain limitations not found in independent claims. For example, dependent claim 2 contains limitations not found in independent claim 1. For instance, claim 2 recites "the controller is further configured to edit the list without regard to whether the communication apparatus communicates with the external apparatus."
- The '581 specification teaches that editing a list without regard to whether the communication apparatus communicates with the external apparatus is inventive over the prior art and not well-understood, routine, and conventional. See, e.g., '581 Patent at 3:16-28, Fig. 13 and associated text.
- 27. In a patent filed by Western Digital in 2004, it admitted there was still a technical "need for a system that allows quick and easy communication ...that allows collaborative use of remote devices by multiple users..." U.S. Patent No. 7,546,353 (emphasis added). That was because, even in 2004, it was "not uncommon [] to have separate computing systems [which] requires that the common data all be kept current, i.e., with the latest version of each common file, as it is typical to update and edit files. This in itself can be an enormously time consuming and tedious... Id. (emphasis added). And Western Digital even cited Data Scape's patent, which it acknowledged was in the same technical field.
- 28. Similarly, in a 2005-filed patent application that also cites Data Scape's earlier patents in the same technical field, Microsoft made clear that the selective transfer of digital data between two devices was a technical problem one year later. U.S. Patent Application No. 20060288036 (data transfer involved "a number of processes, such as enumeration of content on each device ... and efficient metadata retrieval based on user queries. Thus, user experience could also be enhanced by providing optimization for the transfer enumeration protocol between the two

devices.")(emphasisadded)(availableahttps://patents.google.com/patent/US20060288036?oq=20060288036).

- 29. And in 2006, this time in a patent application filed by Apple, Steve Jobs and five Apple computer scientists represented to the USPTO that there was still "a continuing need for improved techniques to transfer and synchronize media data on host computers and/or media players." U.S. Patent Application 20080086494 (emphasis added). And Apple, too, cited Data Scape's asserted patents, which, again, were acknowledged to be *in the same technical field*. *Id* (available at https://patents.google.com/patent/US20080086494A1/en?oq=20080086494).
- 30. The statements in these later-filed patent applications confirm that Data Scape's patent at issue here are directed to technical solutions to technical problems, and improves computer functionalities. The statements in these later-filed patent applications also confirm that the limitations recited in Data Scape's patent at issue here are not well-understood, routine, or conventional, and that the claims are not directed to other ideas "identified by the courts as abstract ideas," that recently have been synthesized into three groups: "(a) mathematical concepts"; "(b) methods of organizing human activity"; or "(c) mental processes." 84 Fed. Reg. 50 (Jan. 7, 2019) (2019 PTO §101 Guidance, citing and surveying post-*Alice* decisions).
- 31. Each Defendant has offered for sale, sold and/or imported into the United States products and services that infringe the '581 patent, and continues to do so. By way of illustrative example, these infringing products and services include, without limitation, Defendant's products and services, *e.g.*, My Cloud series devices, WD SmartWare software, WD Sync software, WD Backup software, and all versions and variations thereof since the issuance of the '581 Patent ("Accused Instrumentalities").
- 32. Each Defendant has directly infringed and continues to infringe the '581 Patent, for example, by making, selling, offering for sale, and/or importing the Accused Instrumentalities, and through its own use and testing of the Accused

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Instrumentalities. Each Defendant uses the Accused Instrumentalities for its own internal non-testing business purposes, while testing the Accused Instrumentalities, and while providing technical support and repair services for the Accused Instrumentalities to its customers.

- 33. For example, the Accused Instrumentalities infringe Claim 1(and other claims) of the '581 Patent. One non-limiting example of the Accused Instrumentalities' infringement is presented below:
- 34. The Accused Instrumentalities include "[a] communication apparatus." For example, the Accused Instrumentalities communicate data stored on one device (e.g. a My Cloud server or a computer) to another device (e.g. a computer, a USB device, a cloud backup service, or a connected My Cloud server). *See, e.g.*, <a href="https://support.wdc.com/knowledgebase/answer.aspx?ID=11395">https://support.wdc.com/knowledgebase/answer.aspx?ID=11395</a> ("WD Sync allows files to be synchronized across multiple computers connected to a My Cloud."); <a href="https://www.wd.com/products/personal-cloud-storage/my-cloud.html">https://www.wd.com/products/personal-cloud-storage/my-cloud.html</a> ("YOUR OWN PERSONAL CLOUD: With the My Cloud personal storage device, you're able to have reliable storage in one place for your photos, videos, important files anything you save and share it anywhere you have an internet connection. With the automatic backup and synchronization software, your content is up to date and accessible from all your devices.").
- The Accused Instrumentalities include "a storage unit configured to store content data to a storage medium." For example, each My Cloud device includes one or more hard disk for storing content data. See, e.g., https://www.wd.com/products/personal-cloud-storage/my-cloud.html ("Everything in One Place: Centralize, organize and back up all your photos, videos and files in one reliable place. Capacity: 3TB, 4TB, 6TB, 8TB"); https://www.wd.com/products/network-attached-storage/my-cloud-expert-seriesex2-ultra.html ("My Cloud EX2 Ultra comes pre-configured with WD Red hard drives, specifically built for NAS systems to provide improved performance within

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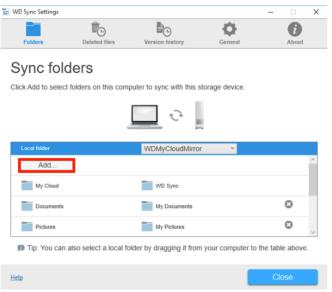
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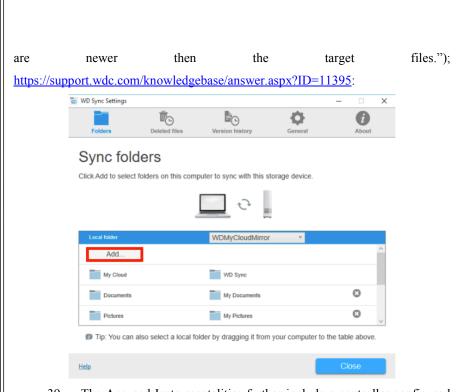
27 28 24x7 environments."); WD MyCloud User Manual 4779-705140 ("USB Backup-Allows you to back up your WD My Cloud device data to a USB device or to backup your USB device data to your WD My Cloud device.; Remote Backup—Allows you to backup WD My Cloud device data to another WD My Cloud device; Cloud Backup—Allows you to backup WD My Cloud device data to an external cloud backup service.").

- The Accused Instrumentalities further include "a communication unit 36. configured to communicate with an external apparatus." For example, each My Cloud device includes hardware and software to communicate with computers, mobile devices, and other external apparatuses over LAN or Internet connections. https://www.wd.com/products/personal-cloud-storage/my-cloud.html See, e.g., ("Access Anywhere: Access and share all your favorite photos and videos using your computer, tablet and smartphone from anywhere you have an Internet connection. \*\*\* Interface: Gigabit Ethernet").
- The Accused Instrumentalities further include "a controller configured to edit a list so that content data is registered in the list." For example, the My Cloud device includes a software or hardware controller that registers a list of content to be transferred to an external apparatus, including without limitation listing selected or updated files for backup or synchronization. See, e.g., WD MyCloud User Manual 4779-705140 ("Enter the following information to create a Remote backup job: \*\*\* Source Folder"; "From the drop-down menu, select the type of [Amazon S3 Cloud] backup you'd like to perform. Options include: \*\*\* • Full Backup: Creates a separate folder containing all of the backup data each time the backup is performed. • Incremental Backup: Overwrites files with source files that are newer then the target files."); https://support.wdc.com/knowledgebase/answer.aspx?ID=16780&lang=en ("WD Sync allows files to be copied from a computer onto a My Cloud Network Attached Storage device. Adding, deleting or modifying files in one location will

lead to the same changes being applied to the other locations."); <a href="https://support.wdc.com/knowledgebase/answer.aspx?ID=11395">https://support.wdc.com/knowledgebase/answer.aspx?ID=11395</a>:



38. The Accused Instrumentalities further include a controller configured "to uniquely associate the list with the external apparatus using a unique identification of the external apparatus." For example, because each external apparatus may require backup or synchronization of a different set of data (including, e.g., different configuration of backup/synchronization targets, or different current data on the external apparatus leading to different data needing to be transferred), the external apparatus is uniquely identified with an associated list. See, e.g., WD MyCloud User Manual 4779-705140 ("Enter the following information to create a Remote backup job: \*\*\* Source Folder"; "From the drop-down menu, select the type of [Amazon S3 Cloud] backup you'd like to perform. Options include: \*\*\* • Full Backup: Creates a separate folder containing all of the backup data each time the backup is performed. • Incremental Backup: Overwrites files with source files that



39. The Accused Instrumentalities further include a controller configured "to extract the list associated with the external apparatus from a plurality of lists in the communication apparatus when the external apparatus is connected to the communication apparatus, and to control transferring of content data registered in the extracted list to the external apparatus." For example, when the My Cloud server is connected to a WD Sync client, the server transfers all changes to the client; likewise, the My Cloud server automatically transfers backup data to configured backup targets. *See, e.g.*, My Cloud User Manual 4779-705147 ("After that, the WD Sync software automatically updates any changes to the file, at any location, on the

other configured devices."); https://support.wdc.com/knowledgebase/answer.aspx?ID=10428:

10. Turning the *Auto Update* On will provide a user with the option to decide how often to update the device's backup.

It can be done Daily, Weekly and Monthly. When ready to proceed, click on *Next*.



- 40. Each Defendant has had knowledge of the '581 Patent and its infringement since at least the filing of the original Complaint in this action, or shortly thereafter, including by way of this lawsuit. By the time of trial, each Defendant will have known and intended (since receiving such notice) that its continued actions would actively induce and contribute to the infringement of the claims of the '581 Patent.
- 41. Each Defendant's affirmative acts of making, using, selling, offering for sale, and/or importing the Accused Instrumentalities have induced and continue to induce users of the Accused Instrumentalities to use the Accused Instrumentalities in their normal and customary way to infringe the claims of the '581 Patent. Use of the Accused Instrumentalities in their ordinary and customary fashion results in infringement of the claims of the '581 Patent.
- 42. For example, each Defendant explains to customers the benefits of using the Accused Instrumentalities, such as by touting their advantages of data backup or synchronization using the accused functionalities. Each Defendant also

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induces its customers to use the Accused Instrumentalities to infringe other claims of the '581 Patent. Each Defendant specifically intended and was aware that the normal and customary use of the Accused Instrumentalities on compatible systems would infringe the '581 Patent. Each Defendant performed the acts that constitute induced infringement, and would induce actual infringement, with the knowledge of the '581 Patent and with the knowledge, or willful blindness to the probability, that the induced acts would constitute infringement. On information and belief, each Defendant engaged in such inducement to promote the sales of the Accused Instrumentalities, e.g., through its user manuals, product support, marketing materials, demonstrations, installation support, and training materials to actively induce the users of the accused products to infringe the '581 Patent. Accordingly, each Defendant has induced and continues to induce end users of the accused products to use the accused products in their ordinary and customary way with compatible systems to make and/or use systems infringing the '581 Patent, knowing that such use of the Accused Instrumentalities with compatible systems will result in infringement of the '581 Patent. For example, in the case of diskless My Cloud products, each Defendant induces end users to add one or more hard drives in order to make the product operable. Accordingly, each Defendant has been (since at least as of filing of the original complaint), and currently is, inducing infringement of the '581 Patent, in violation of 35 U.S.C. § 271(b).

43. Each Defendant has also infringed, and continues to infringe, claims of the '581 Patent by offering to commercially distribute, commercially distributing, making, and/or importing the Accused Instrumentalities, which are used in practicing the process, or using the systems, of the '581 Patent, and constitute a material part of the invention. Each Defendant knows the components in the Accused Instrumentalities to be especially made or especially adapted for use in infringement of the '581 Patent, not a staple article, and not a commodity of commerce suitable for substantial noninfringing use. For example, the ordinary way

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of using the Accused Instrumentalities infringes the patent claims, and as such, is especially adapted for use in infringement. For another example, in the case of diskless My Cloud products, each end users must add one or more hard drives in order to make the product operable. Accordingly, each Defendant has been, and currently is, contributorily infringing the '581 Patent, in violation of 35 U.S.C. § 271(c).

- 44. For similar reasons, each Defendant also infringes the '581 Patent by supplying or causing to be supplied in or from the United States all or a substantial portion of the components of the Accused Instrumentalities, where such components are uncombined in whole or in part, in such manner as to actively induce the combination of such components outside of the United States in a manner that would infringe the '581 Patent if such combination occurred within the United States. For example, each Defendant supplies or causes to be supplied in or from the United States all or a substantial portion of the hardware (e.g., My Cloud devices) and software (e.g., WD Backup, WD Sync, WD SmartWare) components of the Accused Instrumentalities in such a manner as to actively induce the combination of such components (e.g., by instructing users to combine multiple My Cloud devices into an infringing system) outside of the United States.
- 45. Each Defendant also indirectly infringes the '581 Patent by supplying or causing to be supplied in or from the United States components of the Accused Instrumentalities that are especially made or especially adapted for use in infringing the '581 Patent and are not a staple article or commodity of commerce suitable for substantial non-infringing use, and where such components are uncombined in whole or in part, knowing that such components are so made or adapted and intending that such components are combined outside of the United States in a manner that would infringe the '581 Patent if such combination occurred within the United States. Because the Accused Instrumentalities are designed to operate as the claimed system and apparatus, the Accused Instrumentalities have no substantial

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46. As a result of Defendant's infringement of the '581 Patent, Plaintiff Data Scape is entitled to monetary damages in an amount adequate to compensate for each Defendant's infringement, but in no event less than a reasonable royalty for the use made of the invention by each Defendant, together with interest and costs as fixed by the Court.

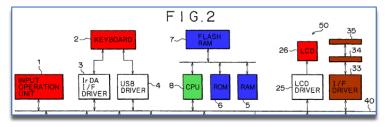
#### **COUNT II**

### **INFRINGEMENT OF U.S. PATENT NO. 7,720,929**

- 47. Plaintiff realleges and incorporates by reference the foregoing paragraphs, as if fully set forth herein.
- 48. Data Scape is the owner by assignment of United States Patent No. 7,720,929 ("the '929 Patent"), entitled "Communication System And Its Method and Communication Apparatus And Its Method." The '929 Patent was duly and legally issued by the United States Patent and Trademark Office on May 18, 2010. A true and correct copy of the '929 Patent is included as Exhibit B.
- 49. In their most basic form, and ignoring many claim limitations, the claims of the '929 Patent are directed to a data synchronization system with a

controller configured to selectively transmit certain digital data between first and second storage media based on a comparison of edited data management information stored in the storage medium. The claims are not directed to abstract ideas. The claims provide technical solutions to technical problems, and, thus, are patent-eligible.

50. As the '929 Patent states, the inventor, Akihiro Morohashi, working at Sony Corporation, aimed to solve the problems skilled artisans in 1999 faced trying to selectively transfer digital data between two electronic apparatuses. *E.g.*, '929 Patent, Col 2:1-39. For example, many used optical disks to accomplish this process, but that was "cumbersome" and did not enable easy or random selection of files to transfer. *Id.* at 2:10-29. And when others burned digital files into hard disk drives or semiconductor memory, those systems still required a large amount of time to selectively transfer certain digital data between electronic apparatuses. *Id.* And in any case, there was no reasonable way to selectively synchronize select digital content data between the apparatuses. *Id.* These problems were specific to the technological process of selective digital-data transfer between electronic apparatuses. *Id.* at 1:27-2:22. And with 28 columns of text and 13 figures, including Figure 2 below, the inventors taught various technical solutions involving an unconventional server with a controller configured with circuitry to compare digital management information:



51. Enabled by these teachings, the '929 patent recites in its claims various technical solutions to the existing technological problems and shortcomings. For

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example, various claims require the then-unconventional system of electronic components configured to use certain digital "management information" to compare, edit, delete and/or selectively transfer separate digital content data between two identified apparatuses. See, e.g., '929 Patent, Claim 1 ("[a]storage [] configured to store management information ... [b] a communicator ... [c] a detector ... [d] an editor configured to select certain data [] and to edit said management information based on said selection, without regard to the connection... and [e] a controller configured to [i] transfer the selected data [] via said communicator based on said management information [ii] compare said management information...with management information [] in said first storage medium and [iii] to transmit data [] based on [the] comparison.").

52. As such, the claims of the '929 patent generally related, in their most basic form, and ignoring many claim limitations, to the concept of data synchronization as understood by a person of ordinary skill in the art. See, e.g., https://www.techopedia.com/definition/1006/data-synchronization ("Data synchronization is the process of maintaining the consistency and uniformity of data instances across all consuming applications and storing devices. It ensures that the same copy or version of data is used in all devices - from source to destination."); https://www.pcmag.com/encyclopedia/term/40854/data-synchronization ("Keeping data in two or more electronic devices up-to-date so that each repository contains the identical information. Data in handheld devices and laptops often require synchronization with the data in a desktop machine or server."); https://en.wikipedia.org/wiki/Data synchronization ("Data synchronization is the process of establishing consistency among data from a source to a target data storage and vice versa and the continuous harmonization of the data over time.").

The '929 patent and its file history make clear that each included independent-claim limitations were not in the prior art, let alone well-understood, routine, and conventional. This includes the claimed [a] storage configured to store

 management information, [b] communicator, [c] detector, [d] editor configured to select certain data and to edit said management information based on said selection, without regard to the connection, and [e] controller configured to [i] transfer the selected data via said communicator based on said management information, [ii] compare said management information with management information in said first storage medium, and [iii] to transmit data based on the comparison. And the dependent claims also include limitations that were not in the prior art, let alone well-understood, routine, and conventional. *See, e.g.*, limitations of claims 2-9 of the '929 patent.

54. For instance, Claim 19 of the '929 Patent, recites:

A communication method, comprising the steps of:

editing management information of data to be transferred from an apparatus to an external apparatus by selecting certain data to be transferred, said management information stored in a storage medium of the apparatus, without regard to the connection of said apparatus and said external apparatus;

<u>detecting</u>, at the apparatus, whether said apparatus and said external apparatus are connected;

comparing at the apparatus, said edited management information with management information of data stored in said external apparatus; and

transmitting the selected data from said apparatus to said external apparatus

based on said management information and a result of the comparison

when said detection indicates that said apparatus and said external

apparatus are connected.

55. Claim 19 does not claim a result. Instead, it recites specific step for accomplishing a result (i.e. transferring data based on the results of a comparison of management information found in two difference devices).
 56. The file history likewise confirms that highlighted terms of editing

56. The file history likewise confirms that highlighted terms of editing management information without regard to connection status and comparing management information was inventive over the prior art. *See*, *e.g.*, Dkt. No. 33-2 (Excerpt of '929 File History) at Page 299-303 of 379 (June 29, 2009 Amendment) (applicant indicating that "edit[ing] management information ... without regard to connection" is inventive over prior art); *id.* at Page 367 of 379 (Sept 17, 2009 Amendment) (indicating that examiner agreed that "comparing management information" would overcome examiner's rejections).

57. Likewise, the specification teaches that the editing management information without regard to connection status and comparing management information was inventive over the prior art and not well-understood, routine, and conventional. '929 patent claims; Figures 1, 12A, 12B; col 1:15-col. 2:39; 7:5-8:24; 9:31-10:53; 11:37-12:15; 23:15-26:43.

58. Claim 19 is not representative of the other claims of the '929 Patent, or of the claims of the other patents asserted in this action. For instance, Claim 1, recites:

A communication system including a first apparatus having a first storage medium, and a second apparatus, said second apparatus comprising:

a second storage medium configured to store management information of data to be transferred to said first storage medium;

<u>a communicator configured to communicate data with said first apparatus;</u> a detector configured to detect whether said first apparatus and said second apparatus are connected;

an editor configured to select certain data to be transferred and to edit said management information based on said selection without regard to the connection of said first apparatus and said second apparatus; and

a controller configured to control transfer of the selected data stored in said second apparatus to said first apparatus via said communicator based on said management information edited by said editor when said detector detects that said first apparatus and said second apparatus are connected, wherein said controller is configured to compare said management information edited by said editor with management information of data stored in said first storage medium and to transmit data in said second apparatus based on result of the comparison.

- 59. Claim 1, does not claim a result, but instead specific technology using specific and non-conventional processes and machines, including:
  - [a] a *second storage medium* configured to store management information of data to be transferred to said *first storage medium*;
  - [b] *a communicator* configured to communicate data with said first apparatus;
  - [c] a detector configured to detect whether said first apparatus and said second apparatus are connected;
  - [d] an editor configured to select certain data [] and to edit said management information based on said selection, without regard to the connection... and
  - [e] a controller configured to:
    - [i] control transfer of the selected data stored in said second
      apparatus to said first apparatus via said communicator based
      on said management information edited by said editor when
      said detector detects that said first apparatus and said second
      apparatus are connected;
    - o [ii] compare said management information...with management information [] in said first storage medium and

o [iii] to transmit data [] based on [the] comparison."

FIRST AMENDED COMPLAINT

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- 60. Claim 19 does not recite the Claim 1's claim "communicator configured to communicate data with said first apparatus" or "a controllers configured to control transfer of the selected data stored in said second apparatus to said first apparatus via said communicator based on said management information edited by said editor when said detector detects that said first apparatus and said second apparatus are connected." These limitations were inventive over the prior art and not well-understood, routine, and conventional.
- 61. For instance, the file history confirms that using the communicator with a controller to control transfer of data based on edited management information without regard to connection status and comparing management information was inventive over the prior art and not well-understood, routine, and conventional. See, e.g., Dkt. No. 33-2 (Excerpt of '929 File History) at Page 299-303 of 379 (June 29, 2009 Amendment) (applicant indicating that "edit[ing] management information without regard to connection" is inventive over prior art); id. at Page 367 of 379 (Sept 17, 2009 Amendment) (indicating that examiner agreed that "comparing management information" would overcome examiner's rejections).
- 62. Likewise, the specification teaches that using the communicator with a controller to control transfer of data based on edited management information without regard to connection status and comparing management information was inventive over the prior art and not well-understood, routine, and conventional. '929 patent at 5:29-41; 6:52-7:18.
- 63. Dependent claims contain limitations not found in independent claims. For example, dependent Claim 5, contains limitations not found in independent claim 1. For instance, Claim 5 claims "[t]he communication system according to claim 1, wherein said controller is configured to control receiving of identification information of said first apparatus via said communicator and to judge whether said identification information of said first apparatus is predetermined identification

 information and to allow said transfer of data when said identification information of said first apparatus is predetermined identification information."

- 64. Likewise, the specification teaches that using an identifier of an apparatus as part of the process of transferring data based on a comparison of management information inventive over the prior art and not well-understood, routine, and conventional. *See, e.g.*, 929' Patent at 23:62-24:6.
- 65. As another example, dependent Claim 21 contains limitations not found in independent claim 19. For instance, Claim 21 claims "The communication method according to claim 19, comprising the further steps of: receiving identification information of said apparatus; judging whether said identification information of said external apparatus is predetermined identification information; and starting said transmission of data when said identification information of said external apparatus is determined to be predetermined identification information."
- 66. Likewise, the specification teaches that using an identifier of an apparatus as part of the process of transferring data based on a comparison of management information inventive over the prior art and not well-understood, routine, and conventional. *See, e.g.*, 929' Patent at 23:62-24:6.
- 67. In a patent filed by Western Digital in 2004, it admitted there was still a technical "need for a system that allows quick and easy communication ...that allows collaborative use of remote devices by multiple users..." U.S. Patent No. 7,546,353 (emphasis added). That was because, even in 2004, it was "not uncommon [] to have separate computing systems [which] requires that the common data all be kept current, i.e., with the latest version of each common file, as it is typical to update and edit files. This in itself can be an enormously time consuming and tedious..." *Id.* (emphasis added). And Western Digital even cited Data Scape's patent, which it acknowledged was in the same technical field.
- 68. Similarly, in a 2005-filed patent application that also cites Data Scape's earlier patents in the same technical field, Microsoft made clear that the selective

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transfer of digital data between two devices was a technical problem one year later. U.S. Patent Application No. 20060288036 (data transfer involved "a number of processes, such as enumeration of content on each device ... and efficient metadata retrieval based on user queries. Thus, user experience could also be enhanced by providing optimization for the transfer enumeration protocol between the two (emphasis added) devices.") (available https://patents.google.com/patent/US20060288036?og=20060288036).

- And in 2006, this time in a patent application filed by Apple, Steve Jobs and five Apple computer scientists represented to the USPTO that there was still "a continuing need for improved techniques to transfer and synchronize media data on host computers and/or media players." U.S. Patent Application 20080086494 (emphasis added). And Apple, too, cited Data Scape's asserted patents, which, again, were acknowledged to be in the same technical field. Id (available at https://patents.google.com/patent/US20080086494A1/en?og=20080086494).
- The statements in these later-filed patent applications confirm that Data Scape's patent at issue here are directed to technical solutions to technical problems, and improves computer functionalities. The statements in these later-filed patent applications also confirm that the limitations recited in Data Scape's patent at issue here are not well-understood, routine, or conventional, and that the claims are not directed to other ideas "identified by the courts as abstract ideas," that recently have been synthesized into three groups: "(a) mathematical concepts"; "(b) methods of organizing human activity"; or "(c) mental processes." 84 Fed. Reg. 50 (Jan. 7, 2019) (2019 PTO §101 Guidance, citing and surveying post-Alice decisions).
- Each Defendant has offered for sale, sold and/or imported into the United States products and services that infringe the '929 patent, and continues to do so. By way of illustrative example, these infringing products and services include, without limitation, Defendant's products and services, e.g., My Cloud devices, WD

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SmartWare software, WD Sync software, and all versions and variations thereof since the issuance of the '929 Patent ("Accused Instrumentalities").

- 72. Each Defendant has directly infringed and continues to infringe the '929 Patent, for example, by making, selling, offering for sale, and/or importing the Accused Instrumentalities, and through its own use and testing of the Accused Instrumentalities. Each Defendant uses the Accused Instrumentalities for its own internal non-testing business purposes, while testing the Accused Instrumentalities, and while providing technical support and repair services for the Accused Instrumentalities to its customers.
- 73. For example, the Accused Instrumentalities infringe Claim 1 (and other claims) of the '929 Patent. One non-limiting example of the Accused Instrumentalities' infringement is presented below:
- The Accused Instrumentalities include "[a] communication system including a first apparatus having a first storage medium, and a second apparatus." For example, the Accused Instrumentalities include a communications system to transfer data stored on a storage medium on a second apparatus (e.g. a My Cloud server or a computer) to a first apparatus with a storage medium (e.g. a computer, a USB device, a cloud backup service, or a connected My Cloud server). See, e.g., https://support.wdc.com/knowledgebase/answer.aspx?ID=11395 ("WD allows files to be synchronized across multiple computers connected to a My Cloud."); https://www.wd.com/products/personal-cloud-storage/my-cloud.html ("YOUR OWN PERSONAL CLOUD: With the My Cloud personal storage device, you're able to have reliable storage in one place for your photos, videos, important files – anything you save – and share it anywhere you have an internet connection. With the automatic backup and synchronization software, your content is up to date and accessible from all your devices."); WD My Cloud User Manual 4779-705140 ("Remote Backups: This option allows you to back up your WD My Cloud device to another WD My Cloud device.").

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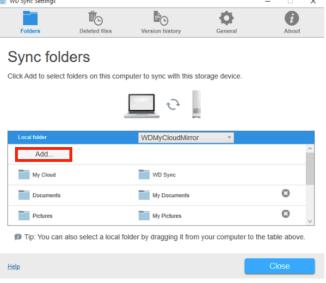
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The Accused Instrumentalities include a second apparatus comprising: "a second storage medium configured to store management information of data to be transferred to said first storage medium." For example, each My Cloud device includes one or more hard disk for management data, including identification of files configured for backup or synchronization, and identification of changes since the last backup or synchronization. See, e.g., https://www.wd.com/products/personalcloud-storage/my-cloud.html ("Everything in One Place: Centralize, organize and back up all your photos, videos and files in one reliable place. \*\*\* Capacity: 3TB, 4TB, 6TB, 8TB"); https://www.wd.com/products/network-attached-storage/mycloud-expert-series-ex2-ultra.html ("My Cloud EX2 Ultra comes pre-configured with WD Red hard drives, specifically built for NAS systems to provide improved performance within 24x7 environments."); WD MyCloud User Manual 4779-705140 ("USB Backup—Allows you to back up your WD My Cloud device data to a USB device or to backup your USB device data to your WD My Cloud device.; Remote Backup—Allows you to backup WD My Cloud device data to another WD My Cloud device; Cloud Backup—Allows you to backup WD My Cloud device data to an external cloud backup service."); My Cloud User Manual 4779-705103 ("Auto updates help keep your safepoint up to date with the content on your WD My Cloud device by copying changes since the last update."); WD MyCloud User Manual 4779-705140 ("Enter the following information to create a Remote backup job: \*\*\* Source Folder"; "From the drop-down menu, select the type of [Amazon S3 Cloud] backup you'd like to perform. Options include: \*\*\* • Full Backup: Creates a separate folder containing all of the backup data each time the backup is performed. • Incremental Backup: Overwrites files with source files that are newer then the target files."); https://support.wdc.com/knowledgebase/answer.aspx?ID=16780&lang=en ("WD Sync allows files to be copied from a computer onto a My Cloud Network Attached Storage device. Adding, deleting or modifying files in one location will RUSS, AUGUST & KABAT

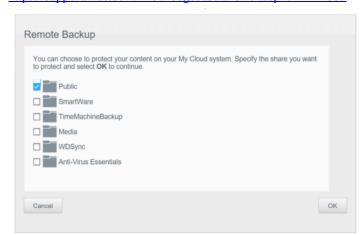
lead to the same changes being applied to the other locations.");

https://support.wdc.com/knowledgebase/answer.aspx?ID=11395:

WD Sync Settings



https://support.wdc.com/knowledgebase/answer.aspx?ID=11807:



76. The Accused Instrumentalities further include a second apparatus comprising "a communicator configured to communicate with said first apparatus."

FIRST AMENDED COMPLAINT

For example, each My Cloud device includes hardware and software to communicate with computers, mobile devices, and other external apparatuses over LAN or Internet connections. *See, e.g.*, <a href="https://www.wd.com/products/personal-cloud-storage/my-cloud.html">https://www.wd.com/products/personal-cloud-storage/my-cloud.html</a> ("Access Anywhere: Access and share all your favorite photos and videos using your computer, tablet and smartphone from anywhere you have an Internet connection. \*\*\* Interface: Gigabit Ethernet").

77. The Accused Instrumentalities further include a second apparatus comprising "a detector configured to detect whether said first apparatus and a second apparatus are connected." For example, the My Cloud device detects whether the sync or backup target is connected before beginning a sync or backup operation. *See, e.g.* <a href="https://support.wdc.com/knowledgebase/answer.aspx?ID=11395">https://support.wdc.com/knowledgebase/answer.aspx?ID=11395</a> ("WD Sync allows files to be synchronized across multiple computers connected to a My Cloud.");

https://support.wdc.com/knowledgebase/answer.aspx?ID=17824&lang=en

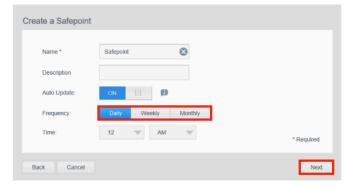
("Remote Access and Network connection failures can occur for many reasons: ISP or Router blocking UDP/TCP ports; Router does not support UPnP or UPnP is disabled; Domain Name Resolution issues");

https://support.wdc.com/knowledgebase/answer.aspx?ID=10428:

FIRST AMENDED COMPLAINT

10.	Turning the	Auto Update On	will provide a	user with	the option to	o decide how	often to
	update the	device's backup.					

It can be done Daily, Weekly and Monthly. When ready to proceed, click on Next.



The Accused Instrumentalities further include a second apparatus comprising "an editor configured to select certain data to be transferred and to edit said management information based on said selection without regard to the connection of said first apparatus." For example, a user can choose which files or folders will be transferred to another device, e.g. which files will be synced or backed up. See, e.g.,

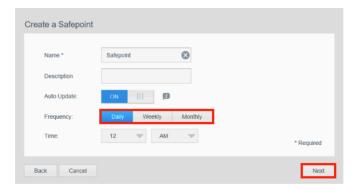
https://support.wdc.com/knowledgebase/answer.aspx?ID=16780&lang=en ("WD Sync allows files to be copied from a computer onto a My Cloud Network Attached Storage device. Adding, deleting or modifying files in one location will lead to the RUSS, AUGUST & KABAT

other locations."); 0 0 Tip: You can also select a local folder by dragging it from your computer to the table above https://support.wdc.com/knowledgebase/answer.aspx?ID=11807: You can choose to protect your content on your My Cloud system. Specify the share you want to protect and select  $\mathbf{OK}$  to continue. OK The Accused Instrumentalities further include a second apparatus comprising "a controller configured to control transfer of the selected data stored in

said second apparatus to said first apparatus via said communicator based on said management information edited by said editor when said detector detects that said first apparatus and said second apparatus are connected." For example, when the My Cloud server is connected to a WD Sync client, the server transfers all changes to the client; likewise, the My Cloud server automatically transfers backup data to configured backup targets. *See, e.g.*, My Cloud User Manual 4779-705147 ("After that, the WD Sync software automatically updates any changes to the file, at any location, on the other configured devices.");

https://support.wdc.com/knowledgebase/answer.aspx?ID=10428:

10. Turning the Auto Update On will provide a user with the option to decide how often to update the device's backup.
It can be done Daily, Weekly and Monthly. When ready to proceed, click on Next.



80. The Accused Instrumentalities further include a second apparatus "wherein said controller is configured to compare said management information edited by said editor with management information of data stored in said first storage medium and to transmit data in said second apparatus based on result of the comparison." For example, the My Cloud system identifies files that are not present on the remote system because they have been changed or updated locally. *See, e.g.*, My Cloud User Manual 4779-705103 ("Auto updates help keep your safepoint up

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to date with the content on your WD My Cloud device by copying changes since the last update.").

- 81. Each Defendant has had knowledge of the '929 Patent and its infringement since at least the filing of the original Complaint in this action, or shortly thereafter, including by way of this lawsuit. By the time of trial, each Defendant will have known and intended (since receiving such notice) that its continued actions would actively induce and contribute to the infringement of the claims of the '929 Patent.
- Each Defendant's affirmative acts of making, using, selling, offering 82. for sale, and/or importing the Accused Instrumentalities have induced and continue to induce users of the Accused Instrumentalities to use the Accused Instrumentalities in their normal and customary way to infringe the claims of the '929 Patent. Use of the Accused Instrumentalities in their ordinary and customary fashion results in infringement of the claims of the '929 Patent.
- For example, each Defendant explains to customers the benefits of using the Accused Instrumentalities, such as by touting their advantages of data backup or synchronization using the accused functionalities. Each Defendant also induces its customers to use the Accused Instrumentalities to infringe other claims of the '929 Patent. Each Defendant specifically intended and was aware that the normal and customary use of the Accused Instrumentalities on compatible systems would infringe the '929 Patent. Each Defendant performed the acts that constitute induced infringement, and would induce actual infringement, with the knowledge of the '929 Patent and with the knowledge, or willful blindness to the probability, that the induced acts would constitute infringement. On information and belief, each Defendant engaged in such inducement to promote the sales of the Accused Instrumentalities, e.g., through its user manuals, product support, marketing materials, demonstrations, installation support, and training materials to actively induce the users of the accused products to infringe the '929 Patent. Accordingly,

each Defendant has induced and continues to induce end users of the accused products to use the accused products in their ordinary and customary way with compatible systems to make and/or use systems infringing the '929 Patent, knowing that such use of the Accused Instrumentalities with compatible systems will result in infringement of the '929 Patent. For example, in the case of diskless My Cloud products, each Defendant induces end users to add one or more hard drives in order to make the product operable. Accordingly, each Defendant has been (since at least as of filing of the original complaint), and currently is, inducing infringement of the '929 Patent, in violation of 35 U.S.C. § 271(b).

- 84. Each Defendant has also infringed, and continues to infringe, claims of the '929 Patent by offering to commercially distribute, commercially distributing, making, and/or importing the Accused Instrumentalities, which are used in practicing the process, or using the systems, of the '929 Patent, and constitute a material part of the invention. Defendant knows the components in the Accused Instrumentalities to be especially made or especially adapted for use in infringement of the '929 Patent, not a staple article, and not a commodity of commerce suitable for substantial noninfringing use. For example, the ordinary way of using the Accused Instrumentalities infringes the patent claims, and as such, is especially adapted for use in infringement. For another example, in the case of diskless My Cloud products, each end users must add one or more hard drives in order to make the product operable. Accordingly, each Defendant has been, and currently is, contributorily infringing the '929 Patent, in violation of 35 U.S.C. § 271(c).
- 85. For similar reasons, each Defendant also infringes the '929 Patent by supplying or causing to be supplied in or from the United States all or a substantial portion of the components of the Accused Instrumentalities, where such components are uncombined in whole or in part, in such manner as to actively induce the combination of such components outside of the United States in a manner that would infringe the '929 Patent if such combination occurred within the United States. For

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example, each Defendant supplies or causes to be supplied in or from the United States all or a substantial portion of the hardware (e.g., My Cloud devices) and software (e.g., WD Backup, WD Sync, WD SmartWare) components of the Accused Instrumentalities in such a manner as to actively induce the combination of such components (e.g., by instructing users to combine multiple My Cloud devices into an infringing system) outside of the United States.

Each Defendant also indirectly infringes the '929 Patent by supplying or causing to be supplied in or from the United States components of the Accused Instrumentalities that are especially made or especially adapted for use in infringing the '929 Patent and are not a staple article or commodity of commerce suitable for substantial non-infringing use, and where such components are uncombined in whole or in part, knowing that such components are so made or adapted and intending that such components are combined outside of the United States in a manner that would infringe the '929 Patent if such combination occurred within the United States. Because the Accused Instrumentalities are designed to operate as the claimed system and apparatus, the Accused Instrumentalities have no substantial non-infringing uses, and any other uses would be unusual, far-fetched, illusory, impractical, occasional, aberrant, or experimental. For example, each Defendant supplies or causes to be supplied in or from the United States all or a substantial portion of the hardware (e.g., separate My Cloud devices) and software (e.g., WD Backup, WD Sync, WD SmartWare) components that are especially made or especially adapted for use in the Accused Instrumentalities, where such hardware and software components are not staple articles or commodities of commerce suitable for substantial noninfringing use, knowing that such components are so made or adapted and intending that such components are combined outside of the United States, as evidenced by each Defendant's own actions or instructions to users in, e.g., combining multiple My Cloud devices into infringing systems, and enabling and configuring the infringing functionalities of the Accused Instrumentalities.

87. As a result of Defendant's infringement of the '929 Patent, Plaintiff Data Scape is entitled to monetary damages in an amount adequate to compensate for each Defendant's infringement, but in no event less than a reasonable royalty for the use made of the invention by each Defendant, together with interest and costs as fixed by the Court.

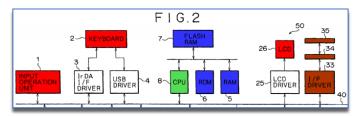
### **COUNT III**

# **INFRINGEMENT OF U.S. PATENT NO. 7,617,537**

- 88. Plaintiff realleges and incorporates by reference the foregoing paragraphs, as if fully set forth herein.
- 89. Data Scape is the owner by assignment of United States Patent No. 7,617,537 ("the '537 Patent"), entitled "Communication System And Its Method and Communication Apparatus And Its Method." The '537 Patent was duly and legally issued by the United States Patent and Trademark Office on November 10, 2009. A true and correct copy of the '537 Patent is included as Exhibit C.
- 90. In their most basic form, and ignoring many claim limitations, the claims of the '537 Patent are directed to a data synchronization system with a controller configured to compare identifiers in first and second apparatuses and thereby selectively delete and transfer certain digital content across the two apparatuses. The claims are not directed to abstract ideas. The claims provide technical solutions to technical problems, and, thus, are patent-eligible.
- 91. As the '537 Patent states, the inventor, Akihiro Morohashi, working at Sony Corporation, aimed to solve the problems skilled artisans in 1999 faced trying to selectively transfer digital data between two electronic apparatuses. *E.g.*, '537 Patent, Col. 2:1-39. For example, many used optical disks to accomplish this process, but that was "cumbersome" and did not enable easy or random selection of files to transfer. *Id.* at 2:10-29. And when others burned digital files into hard disk drives or semiconductor memory, those systems still required a large amount of time to selectively transfer certain digital data between electronic apparatuses. *Id.* And in

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any case, there was no reasonable way to selectively synchronize select digital content data between the apparatuses. *Id.* These problems were specific to the technological process of selective digital-data transfer between electronic apparatuses. *Id.* at 1:27-2:22. And with 28 columns of text and 13 figures, including Figure 2 below, the inventors taught various technical solutions involving an unconventional server with a controller configured with circuitry to compare certain digital management information:



92. Enabled by these teachings, the '537 patent recites in its claims various technical solutions to the existing technological problems and shortcomings. For example, various claims require the then-unconventional system of electronic components configured to use certain digital "identifiers" to compare, edit, delete and/or selectively transfer separate digital content data between two identified apparatuses. *See, e.g.,* '537 Patent, Claim 15 ("[a] communication apparatus configured to transfer content data to a portable apparatus comprising: [a] a storing unit configured to store a program ... [b] a processor configured to execute said program ... [c] wherein said processor ... is operating to: [i] judge whether said portable apparatus and said communication apparatus are connected [ii] compare ... an identifier of said portable apparatus with an identifier stored in said communication apparatus [iii] comparing ... a first list of content data of said first apparatus and a second list of content data in said second apparatus; [iv] transferring . . . first content data, which is registered in said second list and is not

registered in said first list; and [v] deleting . . . second content data, which is registered in said first list and is not registered in said second list.")

93. As such, the claims of the '537 patent generally relate, in their most basic form, and ignoring many claim limitations, to the concept of data synchronization as understood by a person of ordinary skill in the art. See, e.g., https://www.techopedia.com/definition/1006/data-synchronization ("Data synchronization is the process of maintaining the consistency and uniformity of data instances across all consuming applications and storing devices. It ensures that the same copy or version of data is used in all devices - from source to destination."); https://www.pcmag.com/encyclopedia/term/40854/data-synchronization ("Keeping data in two or more electronic devices up-to-date so that each repository contains the identical information. Data in handheld devices and laptops often require synchronization with the data in a desktop machine or server."); https://en.wikipedia.org/wiki/Data\_synchronization ("Data synchronization is the process of establishing consistency among data from a source to a target data storage and vice versa and the continuous harmonization of the data over time.").

94. The '537 patent and its file history make clear that each included independent-claim limitations were not in the prior art, let alone well-understood, routine, and conventional. This includes the claimed (1) communication apparatus configured to transfer content data to a portable apparatus; (2) storing unit configured to store a program and (3) a processor configured to execute said program wherein said processor is operating to: [i] judge whether said portable apparatus and said communication apparatus are connected [ii] compare an identifier of said portable apparatus with an identifier stored in said communication apparatus [iii] comparing a first list of content data of said first apparatus and a second list of content data in said second apparatus; [iv] transferring first content data, which is registered in said first list; and [v] deleting content data, which is registered in said first list and is not registered in

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said second list. And the dependent claims also include limitations that were not in the prior art, let alone well-understood, routine, and conventional. See, e.g., limitations of claims 16-24 of the '537 patent. 95. For instance, Claim 15 of the '537 Patent recites: A communication apparatus configured to transfer content data to a portable

apparatus, comprising:

a storing unit configured to store a program to control said communication apparatus; and

a processor configured to execute said program stored in the storing unit,

wherein said processor executing said program is operating to:

judge whether said portable apparatus and said communication apparatus are connected;

compare, upon judging that said portable apparatus and said communication apparatus are connected, an identifier of said portable apparatus with an identifier stored in said communication apparatus;

compare, when said identifier of said portable apparatus corresponds to said identifier stored in said communication apparatus, a first list of content data of said portable apparatus and a second list of content data of said communication apparatus;

transfer first content data, from the communication apparatus to the portable apparatus, which is registered in said second list and is not registered in said first list; and

delete second content data, from the portable apparatus, which is registered in said first list and is not registered in said second list.

97. Further, the file history confirms that this limitation delete second content data, from the portable apparatus, which is registered in said first list and is not registered in said second list," was inventive over the prior art and not well-understood, routine, and conventional. Specifically, after this limitation was added to the claims of the '537 Patent, the patent claims were allowed and the examiner noted "[n]o reason for allowance is needed as the record is clear in light of applicant's arguments and specification." '537 File History, July 2, 2009, Notice of Allowance.

98. Likewise, the specification teaches deleting musical content from the portable apparatus was inventive over the prior art and not well-understood, routine, and conventional. *E.g.*, '537 Patent at 11:37-51, 14:48-67, 20:9-51, 21:42-53, 21:63-22:11, 24:22-42.

99. Further, Defendants' own documents note that deleting content from one device when content is deleted from another device is a key as aspect of its data syncing technology:

Critical: This folder will now be synchronized with a folder of the same name inside My Cloud storage device. Be aware that data that is deleted on the folder will also be deleted on the My Cloud, while files deleted on the My Cloud WD Sync folder will also be deleted on the computer side as well. This is not a backup software. While the WD Sync does have ways to restore files that have been deleted, caution is advised when deleting data from a synced folder in order to avoid possible data loss.

https://support.wdc.com/knowledgebase/answer.aspx?ID=11395:

100. Claim 15, does not claim a result, but instead specific technology using specific and non-conventional processes and machines, including:

A communication apparatus configured to transfer content data to a portable apparatus, comprising:

a storing unit configured to store a program to control said communication apparatus; and

**a processor** configured to execute said program stored in the storing unit, wherein said processor executing said program is operating to:

judge whether said portable apparatus and said communication apparatus are connected;

compare, upon judging that said portable apparatus and said communication apparatus are connected, an identifier of said portable apparatus with an identifier stored in said communication apparatus;

compare, when said identifier of said **portable apparatus** corresponds to said identifier stored in said **communication apparatus**, a first list of content data of said portable apparatus and a second list of content data of said communication apparatus;

transfer first content data, from the communication apparatus to the portable apparatus, which is registered in said second list and is not registered in said first list; and

delete second content data, from the portable apparatus, which is registered in said first list and is not registered in said second list.

101. Claim 15 is not representative of all claims of the '537 patent. For example, it specifically requires a "portable apparatus" and a "communication apparatus which is not required by other claims of the '537 patent, including Claim 1. Claim 1 recites:

A communication method to transfer content data to a first apparatus from a second apparatus, comprising:

judging whether said first apparatus and said second apparatus are connected; comparing, upon judging that said first apparatus and said second apparatus are connected, an identifier of said first apparatus with an identifier stored in said second apparatus;

comparing, when said identifier of said first apparatus corresponds to said identifier stored in said second apparatus, a first list of content data of said first apparatus and a second list of content data of said second apparatus;

transferring, from the second apparatus to the first apparatus, first content data, which is registered in said second list and is not registered in said first list; and

deleting, from the first apparatus, second content data, which is registered in said first list and is not registered in said second list.

102. Claim 1 does not claim a result. Instead, it recites specific steps for accomplishing a result (i.e. transferring data based on the results of a comparison of management information found in two different apparatuses and deleting information from the first apparatus).

103. Dependent claims contain limitations not found in independent claims. For example, dependent Claim 20 contains limitations not found independent claim 15. For instance, Claim 20 claims "[t]he communication apparatus according to claim 15, wherein a plurality of said second list exist at said communication apparatus, wherein each plurality of said second list is associated with at least one identifier of the portable apparatus, and wherein said processor executing said program is further operating to: extract said second list which is associated with said at least one identifier of said portable apparatus among said plurality of said second list in said judging."

104. The '537 specification teaches that using an identifier of an apparatus as part of the process of transferring data based on a comparison of management information inventive over the prior art and not well-understood, routine, and conventional. See, e.g., 537 Patent at 23:59-24:3.

105. As another example, dependent claim 10 contains limitations not found in independent claim 1. For instance, claim 10 claims "[t]he communication method according to claim 9, said method further comprising: extracting the second list which is associated with at least one identifier of said first apparatus among a plurality of said second list in said judging, wherein the plurality of said second list exist at said second apparatus, wherein each plurality of said second list is associated with the at least one identifier of said first apparatus."

106. The '537 specification teaches that using an identifier of an apparatus as part of the process of transferring data based on a comparison of management information inventive over the prior art and not well-understood, routine, and conventional. See, e.g., 537 Patent at 23:59-24:3.

107. In a patent filed by Western Digital in 2004, it admitted there was still a technical "need for a system that allows quick and easy communication ...that allows collaborative use of remote devices by multiple users..." U.S. Patent No. 7,546,353 (emphasis added). That was because, even in 2004, it was "not uncommon [] to have separate computing systems [which] requires that the common data all be kept current, i.e., with the latest version of each common file, as it is typical to update and edit files. This in itself can be an enormously time consuming and tedious..." *Id.* (emphasis added). And Western Digital even cited Data Scape's patent, which it acknowledged was in the same technical field.

108. Similarly, in a 2005-filed patent application that also cites Data Scape's earlier patents *in the same technical field*, Microsoft made clear that the selective transfer of digital data between two devices was a technical problem one year later.

U.S. Patent Application No. 20060288036 (data transfer involved "a number of

processes, such as enumeration of content on each device ... and efficient metadata retrieval based on user queries. Thus, user experience could also be enhanced by providing optimization for the transfer enumeration protocol between the two devices.") (emphasis added) (available at https://patents.google.com/patent/US20060288036?oq=20060288036).

109. And in 2006, this time in a patent application filed by Apple, Steve Jobs and five Apple computer scientists represented to the USPTO that there was still "a continuing need for improved techniques to transfer and synchronize media data on host computers and/or media players." U.S. Patent Application 20080086494 (emphasis added). And Apple, too, cited Data Scape's asserted patents, which, again, were acknowledged to be *in the same technical field*. *Id* (available at https://patents.google.com/patent/US20080086494A1/en?oq=20080086494).

110. The statements in these later-filed patent applications confirm that Data Scape's patent at issue here are directed to technical solutions to technical problems, and improves computer functionalities. The statements in these later-filed patent applications also confirm that the limitations recited in Data Scape's patent at issue here are not well-understood, routine, or conventional, and that the claims are not directed to other ideas "identified by the courts as abstract ideas," that recently have been synthesized into three groups: "(a) mathematical concepts"; "(b) methods of organizing human activity"; or "(c) mental processes." 84 Fed. Reg. 50 (Jan. 7, 2019) (2019 PTO §101 Guidance, citing and surveying post-*Alice* decisions).

111. Each Defendant has offered for sale, sold and/or imported into the United States products and services that infringe the '537 patent, and continues to do so. By way of illustrative example, these infringing products and services include, without limitation, Defendant's products and services, *e.g.*, My Cloud devices, WD SmartWare software, WD Sync software, and all versions and variations thereof since the issuance of the '537 Patent ("Accused Instrumentalities").

 112. Each Defendant has directly infringed and continues to infringe the '537 Patent, for example, by making, selling, offering for sale, and/or importing the Accused Instrumentalities, and through its own use and testing of the Accused Instrumentalities. Each Defendant uses the Accused Instrumentalities for its own internal non-testing business purposes, while testing the Accused Instrumentalities, and while providing technical support and repair services for the Accused Instrumentalities to its customers.

- 113. For example, the Accused Instrumentalities infringe Claim 43 (and other claims) of the '537 Patent. One non-limiting example of the Accused Instrumentalities' infringement is presented below:
- 114. The Accused Instrumentalities include "[a] computer readable storage medium encoded with computer program instructions executable by a computer to implement a method of transferring content data to a first apparatus from a second apparatus." For example, the Accused Instrumentalities include instructions for transferring content data, as described below.
- 115. The Accused Instrumentalities include instructions that "judge whether said first apparatus and said second apparatus are connected." For example, the My Cloud device detects whether the sync or backup target is connected before beginning a sync or backup operation. *See, e.g.*

https://support.wdc.com/knowledgebase/answer.aspx?ID=11395 ("WD Sync allows files to be synchronized across multiple computers connected to a My Cloud.");

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("Remote Access and Network connection failures can occur for many reasons: ISP or Router blocking UDP/TCP ports; Router does not support UPnP or UPnP is

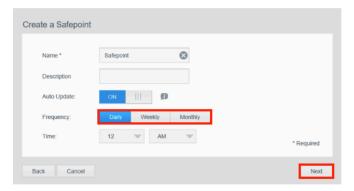
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# disabled; Domain Name Resolution issues");

#### https://support.wdc.com/knowledgebase/answer.aspx?ID=10428:

 Turning the Auto Update On will provide a user with the option to decide how often to update the device's backup.

It can be done Daily, Weekly and Monthly. When ready to proceed, click on Next.



116. The Accused Instrumentalities include instructions that "compare, upon judging that said first apparatus and said second apparatus are connected, an identifier of said first apparatus with a corresponding identifier in said second apparatus." For example, because each unique first apparatus may require backup or synchronization of a different set of data (including, *e.g.*, different configuration of backup/synchronization targets, or different current data on the external apparatus leading to different data needing to be transferred), the Accused Instrumentalities must determine a corresponding identifier. *See, e.g.*, WD MyCloud User Manual 4779-705140 ("Enter the following information to create a Remote backup job: \*\*\* Source Folder"; "From the drop-down menu, select the type of [Amazon S3 Cloud] backup you'd like to perform. Options include: \*\*\* • Full Backup: Creates a separate folder containing all of the backup data each time the backup is performed. •

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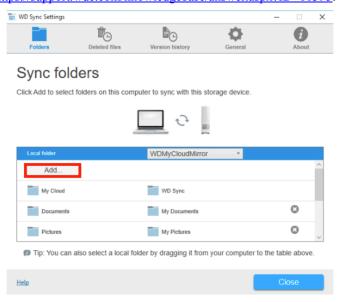
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Incremental Backup: Overwrites files with source files that are newer then the target files."); <a href="https://support.wdc.com/knowledgebase/answer.aspx?ID=11395">https://support.wdc.com/knowledgebase/answer.aspx?ID=11395</a>:



117. The Accused Instrumentalities include instructions that "compare, when said identifier of said first apparatus corresponds to said identifier stored in said second apparatus, a first list of content data of said first apparatus and a second list of content data of said second apparatus." For example, the My Cloud device identifies a list of content that has not been previously synced or backed up to the uniquely identified first apparatus. See, e.g., https://support.wdc.com/knowledgebase/answer.aspx?ID=16780&lang=en ("WD Sync allows files to be copied from a computer onto a My Cloud Network Attached Storage device. Adding, deleting or modifying files in one location will lead to the same changes being applied to the other locations."); My Cloud User Manual 4779-705103 ("Auto updates help keep your safepoint up to date with the content on your WD My Cloud device by copying changes since the last update."); My Cloud User

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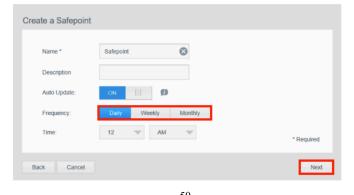
Manual 4779-705147 ("After that, the WD Sync software automatically updates any changes to the file, at any location, on the other configured devices.")

118. The Accused Instrumentalities include instructions to "transfer first content data, from the second apparatus to the first apparatus, which is registered in said second list and is not registered in said first list." For example, when the My Cloud device is connected to a WD Sync client, the server transfers all changes to the client; likewise, the My Cloud server automatically transfers backup data to configured backup targets that has not previously been transferred. See, e.g., https://support.wdc.com/knowledgebase/answer.aspx?ID=16780&lang=en ("WD Sync allows files to be copied from a computer onto a My Cloud Network Attached Storage device. Adding, deleting or modifying files in one location will lead to the same changes being applied to the other locations."); My Cloud User Manual 4779-705103 ("Auto updates help keep your safepoint up to date with the content on your WD My Cloud device by copying changes since the last update."); My Cloud User Manual 4779-705147 ("After that, the WD Sync software automatically updates any changes to the file, at any location, on the other configured devices.");

https://support.wdc.com/knowledgebase/answer.aspx?ID=10428:

10. Turning the Auto Update On will provide a user with the option to decide how often to update the device's backup.

It can be done Daily, Weekly and Monthly. When ready to proceed, click on Next.



FIRST AMENDED COMPLAINT

119. The Accused Instrumentalities include instructions to "delete second content data, from the first apparatus, which is registered in said first list and is not registered in said second list." For example, the My Cloud device will automatically synchronize deletions. *See, e.g.*,

https://support.wdc.com/knowledgebase/answer.aspx?ID=11395:

Critical: This folder will now be synchronized with a folder of the same name inside My Cloud storage device. Be aware that data that is deleted on the folder will also be deleted on the My Cloud, while files deleted on the My Cloud WD Sync folder will also be deleted on the computer side as well. This is not a backup software. While the WD Sync does have ways to restore files that have been deleted, caution is advised when deleting data from a synced folder in order to avoid possible data loss.

- 120. Each Defendant has had knowledge of the '537 Patent and its infringement since at least the filing of the original Complaint in this action, or shortly thereafter, including by way of this lawsuit. By the time of trial, each Defendant will have known and intended (since receiving such notice) that its continued actions would actively induce and contribute to the infringement of the claims of the '537 Patent.
- 121. Each Defendant's affirmative acts of making, using, selling, offering for sale, and/or importing the Accused Instrumentalities have induced and continue to induce users of the Accused Instrumentalities to use the Accused Instrumentalities in their normal and customary way to infringe the claims of the '537 Patent. Use of the Accused Instrumentalities in their ordinary and customary fashion results in infringement of the claims of the '537 Patent.
- 122. For example, each Defendant explains to customers the benefits of using the Accused Instrumentalities, such as by touting their advantages of data backup or synchronization using the accused functionalities. Each Defendant also induces its customers to use the Accused Instrumentalities to infringe other claims

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of the '537 Patent. Each Defendant specifically intended and was aware that the normal and customary use of the Accused Instrumentalities on compatible systems would infringe the '537 Patent. Each Defendant performed the acts that constitute induced infringement, and would induce actual infringement, with the knowledge of the '537 Patent and with the knowledge, or willful blindness to the probability, that the induced acts would constitute infringement. On information and belief, each Defendant engaged in such inducement to promote the sales of the Accused Instrumentalities, e.g., through its user manuals, product support, marketing materials, demonstrations, installation support, and training materials to actively induce the users of the accused products to infringe the '537 Patent. Accordingly, each Defendant has induced and continues to induce end users of the accused products to use the accused products in their ordinary and customary way with compatible systems to make and/or use systems infringing the '537 Patent, knowing that such use of the Accused Instrumentalities with compatible systems will result in infringement of the '537 Patent. For example, in the case of diskless My Cloud products, each Defendant induces end users to add one or more hard drives in order to make the product operable. Accordingly, each Defendant has been (since at least as of filing of the original complaint), and currently is, inducing infringement of the '537 Patent, in violation of 35 U.S.C. § 271(b).

123. Each Defendant has also infringed, and continues to infringe, claims of the '537 Patent by offering to commercially distribute, commercially distributing, making, and/or importing the Accused Instrumentalities, which are used in practicing the process, or using the systems, of the '537 Patent, and constitute a material part of the invention. Defendant knows the components in the Accused Instrumentalities to be especially made or especially adapted for use in infringement of the '537 Patent, not a staple article, and not a commodity of commerce suitable for substantial noninfringing use. For example, the ordinary way of using the Accused Instrumentalities infringes the patent claims, and as such, is especially

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adapted for use in infringement. For another example, in the case of diskless My Cloud products, each end users must add one or more hard drives in order to make the product operable. Accordingly, each Defendant has been, and currently is, contributorily infringing the '537 Patent, in violation of 35 U.S.C. § 271(c).

124. For similar reasons, each Defendant also infringes the '537 Patent by supplying or causing to be supplied in or from the United States all or a substantial portion of the components of the Accused Instrumentalities, where such components are uncombined in whole or in part, in such manner as to actively induce the combination of such components outside of the United States in a manner that would infringe the '537 Patent if such combination occurred within the United States. For example, each Defendant supplies or causes to be supplied in or from the United States all or a substantial portion of the hardware (e.g., My Cloud devices) and software (e.g., WD Backup, WD Sync, WD SmartWare) components of the Accused Instrumentalities in such a manner as to actively induce the combination of such components (e.g., by instructing users to combine multiple My Cloud devices into an infringing system) outside of the United States.

125. Each Defendant also indirectly infringes the '537 Patent by supplying or causing to be supplied in or from the United States components of the Accused Instrumentalities that are especially made or especially adapted for use in infringing the '537 Patent and are not a staple article or commodity of commerce suitable for substantial non-infringing use, and where such components are uncombined in whole or in part, knowing that such components are so made or adapted and intending that such components are combined outside of the United States in a manner that would infringe the '537 Patent if such combination occurred within the United States. Because the Accused Instrumentalities are designed to operate as the claimed system and apparatus, the Accused Instrumentalities have no substantial non-infringing uses, and any other uses would be unusual, far-fetched, illusory, impractical, occasional, aberrant, or experimental. For example, each Defendant

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supplies or causes to be supplied in or from the United States all or a substantial portion of the hardware (e.g., separate My Cloud devices) and software (e.g., WD Backup, WD Sync, WD SmartWare) components that are especially made or especially adapted for use in the Accused Instrumentalities, where such hardware and software components are not staple articles or commodities of commerce suitable for substantial noninfringing use, knowing that such components are so made or adapted and intending that such components are combined outside of the United States, as evidenced by each Defendant's own actions or instructions to users in, e.g., combining multiple My Cloud devices into infringing systems, and enabling and configuring the infringing functionalities of the Accused Instrumentalities.

126. As a result of Defendant's infringement of the '537 Patent, Plaintiff Data Scape is entitled to monetary damages in an amount adequate to compensate for each Defendant's infringement, but in no event less than a reasonable royalty for the use made of the invention by each Defendant, together with interest and costs as fixed by the Court.

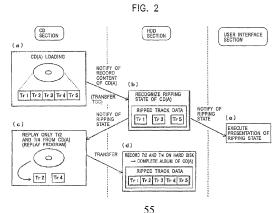
## **COUNT IV**

### **INFRINGEMENT OF U.S. PATENT NO. 9,715,893**

- 127. Plaintiff realleges and incorporates by reference the foregoing paragraphs, as if fully set forth herein.
- 128. Data Scape is the owner by assignment of United States Patent No. 9,715,893 ("the '893 Patent"), entitled "Recording Apparatus, Server Apparatus, Recording Method, Program and Storage Medium." The '893 Patent was duly and legally issued by the United States Patent and Trademark Office on July 25, 2017. A true and correct copy of the '893 Patent is included as Exhibit D.
- 129. In their most basic forms, and ignoring many claim limitations, the claims are directed to with a communication apparatus configured to automatically and selectively transmit certain digital data between first and second storage media based on a comparison of management data stored in the storage medium and

displaying a symbolic figure showing the transfer status of the files being transferred. The claims are not directed to abstract ideas. The claims provide technical solutions to technical problems, and, thus, are patent-eligible.

Ryuichiro Togashi, working at Sony Corporation, aimed to solve the problems skilled artisans in 2002 faced when trying to selectively transfer data between two electronic apparatuses. *E.g.*, '893 Patent at 2:63-4:7. For example, when optical disks were used to transfer files to a hard drive, it would often result in duplication of files in the hard drive. *Id.* at 2:3-2:16. This would result in both unnecessary storage of duplicate files on the hard dive as well as lost time associated with transfer of the duplicate files. *Id.* at 2:11-22. No reasonable way to selectively synchronize the data, except to have the user manually search for duplicates before transferring the data. *Id.* at 2:33-59. These problems were specific to the technological process of automatic and selective digital-data transfer between electronic apparatuses. *Id.* at 1:34-2:59. And with 30 columns of text and 19 figures, including Figure 2 below, the inventors taught various technical solutions involving an unconventional server with an apparatus including circuitry configured to compare certain digital management information:



FIRST AMENDED COMPLAINT

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131. Enabled by these teachings, the '893 patent recite in its claims various technical solutions to the existing technological problems and shortcomings. For example, various claims require the then-unconventional system of electronic components configured to automatically use digital "management data" to compare and selectively transfer separate digital content data between two apparatuses and the display of a symbolic figure showing the transfer status. See, e.g., '893 Patent, Claim 32 ("[a]n information processing apparatus comprising circuitry configured to: [a] automatically read the first management data from a first storage medium, the first management data identifying files of source data recorded on the first storage medium; [b] automatically identifying one of the files of source data based on the first management data and second management data, the second management identifying files of transferred data stored on a second storage medium, the one of the files of source data being absent from the second storage medium; [c] automatically transfer the one of the files of source data to the second storage medium, the one of the files of source data being transferred become one of the files of transferred data; and [d] automatically output transferring status of the one of the files of source data by a symbolic figure.").

132. As such, the claims of the '893 patent generally relate, in their most basic form, and ignoring many claim limitations, to the concept of data synchronization as understood by a person of ordinary skill in the art. See, e.g., https://www.techopedia.com/definition/1006/data-synchronization ("Data synchronization is the process of maintaining the consistency and uniformity of data instances across all consuming applications and storing devices. It ensures that the same copy or version of data is used in all devices - from source to destination."); https://www.pcmag.com/encyclopedia/term/40854/data-synchronization ("Keeping data in two or more electronic devices up-to-date so that each repository contains the identical information. Data in handheld devices and laptops often require

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synchronization with the data in a desktop machine or server."); <a href="https://en.wikipedia.org/wiki/Data\_synchronization">https://en.wikipedia.org/wiki/Data\_synchronization</a> ("Data synchronization is the process of establishing consistency among data from a source to a target data storage and vice versa and the continuous harmonization of the data over time.").

133. The '893 patent and its file history make clear that each included independent-claim limitations were not in the prior art, let alone well-understood, routine, and conventional. This includes the claimed information processing apparatus comprising circuitry configured to: automatically read the first management data from a first storage medium, the first management data identifying files of source data recorded on the first storage medium; automatically identifying one of the files of source data based on the first management data and second management data, the second management identifying files of transferred data stored on a second storage medium, the one of the files of source data being absent from the second storage medium; automatically transfer the one of the files of source data to the second storage medium, the one of the files of source data being transferred become one of the files of transferred data; and automatically output transferring status of the one of the files of source data by a symbolic figure. And the dependent claims also include limitations that were not in the prior art, let alone wellunderstood, routine, and conventional. See, e.g., limitations of claims 33-45 of the '893 patent.

134. For instance, Claim 32 of the '893 Patent recites:

circuitry configured to

automatically read first management data from a first storage medium, the first management data identifying files of source data recorded on the first storage medium,

automatically identifying one of the files of source data based on the first management data and second management data, the second management data

identifying files of transferred data stored on a second storage medium, the one of the files of source data being absent from the second storage medium, automatically transfer the one of the files of source data to the second storage medium, the one of the files of the source data being transferred becoming one of the files of transferred data, and

automatically output transferring status of the one of the files of source data by a symbolic figure.

135. The limitations highlighted above ("automatically output transferring status of the one of the files of source data by a symbolic figure") is not found in the claims of the '929 Patent or the other patents asserted in this action.

136. Further, the file history confirms that these limitations were inventive over prior art and not well-understood, routine, and conventional. Specifically, after these limitations were added to the claims of the '893 Patent, the patent claims were allowed by the Examiner. See '893 File History, March 21, 2017, Notice of Allowance.

137. Likewise, the specification teaches that using and comparing management information to control data transfer was inventive over the prior art and not well-understood, routine, and conventional. '893 patent claims; Figs. 1, 16, 17A, 17B, col 1:41-2:59; 7:35-8:2; 9;4-10:2; 13:14-15:14; 23:48-26:63; 29:1-30:45.

138. Claim 32 of the '893 Patent does not claim a result, but instead specific technology using specific and non-conventional processes and machines, including:

#### circuitry configured to

automatically read first management data from a first storage medium, the first management data identifying files of source data recorded on the first storage medium,

automatically identifying one of the **files of source data** based on the first management data and **second management data**, the second management data identifying files of transferred data stored on a **second storage medium**,

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the one of the files of source data being absent from the second storage

automatically transfer the one of the files of source data to the second storage medium, the one of the files of the source data being transferred becoming one of the files of transferred data, and

automatically output transferring status of the one of the files of source data by a symbolic figure.

139. Claim 32 is not representative of all claims of the '893 patent. For example, it requires a "circuitry" configured in specific ways, which is not required in claim 12 of the '893 patent. Claim 12 recites:

A method of an information processing apparatus for transferring data, the method comprising:

automatically reading first management data from a first storage medium, the first management data identifying files of source data recorded on the first storage medium;

automatically identifying, by circuitry of the information processing apparatus, one of the files of source data based on the first management data and second management data, the second management data identifying files of transferred data stored on a second storage medium, the one of the files of source data being absent from the second storage medium; and

automatically transferring the one of the files of source data to the second storage medium, the one of the files of source data being transferred becoming one of the files of transferred data; and

automatically displaying transferring status of the one of the files of source data by a symbolic figure

140. Claim 12 does not claim a result. Instead, it recites specific steps for accomplishing a result (e.g., reading first management data, identifying one of the files of source data, transferring files, and displaying transferring status).

142. In a patent filed by Western Digital in 2004, it admitted there was still a technical "need for a system that allows quick and easy communication ...that allows collaborative use of remote devices by multiple users..." U.S. Patent No. 7,546,353 (emphasis added). That was because, even in 2004, it was "not uncommon [] to have separate computing systems [which] requires that the common data all be kept current, i.e., with the latest version of each common file, as it is typical to update and edit files. This in itself can be an enormously time consuming and tedious..." *Id.* (emphasis added). And Western Digital even cited Data Scape's patent, which it acknowledged was in the same technical field.

earlier patents *in the same technical field*, Microsoft made clear that the selective transfer of digital data between two devices was a technical problem one year later. U.S. Patent Application No. 20060288036 (data transfer involved "a number of processes, such as enumeration of content on each device ... and efficient metadata retrieval based on user queries. Thus, **user experience could also be enhanced by providing optimization for the transfer enumeration protocol between the two devices.**") (emphasis added) (available at https://patents.google.com/patent/US20060288036?oq=20060288036).

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144. And in 2006, this time in a patent application filed by Apple, Steve Jobs and five Apple computer scientists represented to the USPTO that there was still "a continuing need for improved techniques to transfer and synchronize media data on host computers and/or media players." U.S. Patent Application 20080086494 (emphasis added). And Apple, too, cited Data Scape's asserted patents, which, again, were acknowledged to be *in the same technical field*. *Id* (available at https://patents.google.com/patent/US20080086494A1/en?oq=20080086494).

145. The statements in these later-filed patent applications confirm that Data Scape's patent at issue here are directed to technical solutions to technical problems, and improves computer functionalities. The statements in these later-filed patent applications also confirm that the limitations recited in Data Scape's patent at issue here are not well-understood, routine, or conventional, and that the claims are not directed to other ideas "identified by the courts as abstract ideas," that recently have been synthesized into three groups: "(a) mathematical concepts"; "(b) methods of organizing human activity"; or "(c) mental processes." 84 Fed. Reg. 50 (Jan. 7, 2019) (2019 PTO §101 Guidance, citing and surveying post-*Alice* decisions).

146. Each Defendant has offered for sale, sold and/or imported into the United States products and services that infringe the '893 patent, and continues to do so. By way of illustrative example, these infringing products and services include, without limitation, Defendant's products and services, *e.g.*, My Cloud devices, and all versions and variations thereof since the issuance of the '893 Patent ("Accused Instrumentalities").

147. Each Defendant has directly infringed and continues to infringe the '893 Patent, for example, by making, selling, offering for sale, and/or importing the Accused Instrumentalities, and through its own use and testing of the Accused Instrumentalities. Each Defendant uses the Accused Instrumentalities for its own internal non-testing business purposes, while testing the Accused Instrumentalities,

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and while providing technical support and repair services for the Accused Instrumentalities to its customers.

148. For example, the Accused Instrumentalities infringe Claim 1 (and other claims) of the '893 Patent. One non-limiting example of the Accused Instrumentalities' infringement is presented below:

149. The Accused Instrumentalities include "[a] non-transitory computerreadable storage medium storing instructions which, when executed by a computer, cause the computer to perform a method of an information processing apparatus for transferring data." For example, the Accused Instrumentalities include instructions for transferring data in the manner described below.

150. The Accused Instrumentalities include instructions for "automatically reading first management data from a first storage medium, the first management data identifying files of source data stored on the first storage medium." For example, each My Cloud device includes one or more hard disk for management data, including identification of files configured for backup or synchronization, and identification of changes since the last backup or synchronization. See, e.g., https://www.wd.com/products/personal-cloud-storage/my-cloud.html ("Everything in One Place: Centralize, organize and back up all your photos, videos and files in reliable place. Capacity: 3TB, 4TB, 6TB, 8TB"); https://www.wd.com/products/network-attached-storage/my-cloud-expert-seriesex2-ultra.html ("My Cloud EX2 Ultra comes pre-configured with WD Red hard drives, specifically built for NAS systems to provide improved performance within 24x7 environments."); WD MyCloud User Manual 4779-705140 ("USB Backup-Allows you to back up your WD My Cloud device data to a USB device or to backup your USB device data to your WD My Cloud device.; Remote Backup—Allows you to backup WD My Cloud device data to another WD My Cloud device; Cloud Backup—Allows you to backup WD My Cloud device data to an external cloud backup service."); My Cloud User Manual 4779-705103 ("Auto updates help keep

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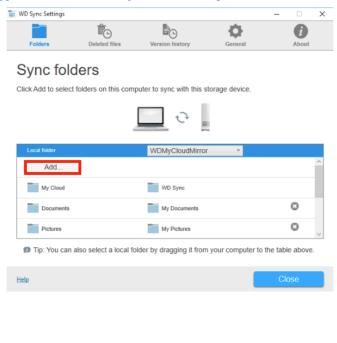
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your safepoint up to date with the content on your WD My Cloud device by copying changes since the last update."); WD MyCloud User Manual 4779-705140 ("Enter the following information to create a Remote backup job: \*\*\* Source Folder"; "From the drop-down menu, select the type of [Amazon S3 Cloud] backup you'd like to perform. Options include: \*\*\* • Full Backup: Creates a separate folder containing all of the backup data each time the backup is performed. • Incremental Backup: Overwrites files with source files that are newer then the target files."); https://support.wdc.com/knowledgebase/answer.aspx?ID=16780&lang=en ("WD Sync allows files to be copied from a computer onto a My Cloud Network Attached Storage device. Adding, deleting or modifying files in one location will lead to the same changes being applied the other locations."); https://support.wdc.com/knowledgebase/answer.aspx?ID=11395:



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FIRST AMENDED COMPLAINT

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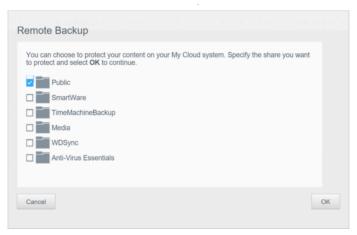
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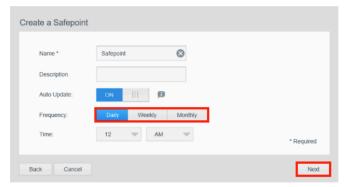


- 151. The Accused Instrumentalities include instructions for "automatically identifying, by the computer, one of the files of source data based on the first management data and second management data, the second management data identifying files of transferred data stored on a second storage medium, the one of the files of source data being absent from the second storage medium." For example, the My Cloud system identifies files that are not present on the remote system because they have been changed or updated locally. See, e.g., My Cloud User Manual 4779-705103 ("Auto updates help keep your safepoint up to date with the content on your WD My Cloud device by copying changes since the last update.").
- 152. The Accused Instrumentalities include instructions for "automatically transferring the one of the files of source data to the second storage medium, the one of the files of source data being transferred becoming one of the files of transferred data." For example, when the My Cloud server is connected to a WD Sync client, the server transfers all changes to the client; likewise, the My Cloud server automatically transfers backup data to configured backup targets. See, e.g., My Cloud User Manual 4779-705147 ("After that, the WD Sync software automatically

 updates any changes to the file, at any location, on the other configured devices."); <a href="https://support.wdc.com/knowledgebase/answer.aspx?ID=10428">https://support.wdc.com/knowledgebase/answer.aspx?ID=10428</a>:

10. Turning the Auto Update On will provide a user with the option to decide how often to update the device's backup.

It can be done Daily, Weekly and Monthly. When ready to proceed, click on Next.



153. The Accused Instrumentalities include instructions for "automatically displaying transferring status of the one of the files of source data by a symbolic figure." For example, the My Cloud interface displays the progress of a transfer. *See, e.g.*, WD My Cloud User Manual 4779-705140 ("Use the following steps to back up your WD My Cloud to a remote location: \*\*\* In the USB Backup Jobs area, click the Start Backup icon to begin your backup. The progress of the backup appears in

Jobs

area.");

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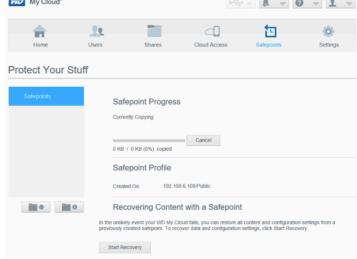
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Backup

- 154. Each Defendant has had knowledge of the '893 Patent and its infringement since at least the filing of the original Complaint in this action, or shortly thereafter, including by way of this lawsuit. By the time of trial, each Defendant will have known and intended (since receiving such notice) that its continued actions would actively induce and contribute to the infringement of the claims of the '893 Patent.
- 155. Each Defendant's affirmative acts of making, using, selling, offering for sale, and/or importing the Accused Instrumentalities have induced and continue to induce users of the Accused Instrumentalities to use the Accused Instrumentalities in their normal and customary way to infringe the claims of the '893 Patent. Use of the Accused Instrumentalities in their ordinary and customary fashion results in infringement of the claims of the '893 Patent.

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156. For example, each Defendant explains to customers the benefits of using the Accused Instrumentalities, such as by touting their advantages of data backup or synchronization using the accused functionalities. Each Defendant also induces its customers to use the Accused Instrumentalities to infringe other claims of the '893 Patent. Each Defendant specifically intended and was aware that the normal and customary use of the Accused Instrumentalities on compatible systems would infringe the '893 Patent. Each Defendant performed the acts that constitute induced infringement, and would induce actual infringement, with the knowledge of the '893 Patent and with the knowledge, or willful blindness to the probability, that the induced acts would constitute infringement. On information and belief, each Defendant engaged in such inducement to promote the sales of the Accused Instrumentalities, e.g., through its user manuals, product support, marketing materials, demonstrations, installation support, and training materials to actively induce the users of the accused products to infringe the '893 Patent. Accordingly, each Defendant has induced and continues to induce end users of the accused products to use the accused products in their ordinary and customary way with compatible systems to make and/or use systems infringing the '893 Patent, knowing that such use of the Accused Instrumentalities with compatible systems will result in infringement of the '893 Patent. For example, in the case of diskless My Cloud products, each Defendant induces end users to add one or more hard drives in order to make the product operable. Accordingly, each Defendant has been (since at least as of filing of the original complaint), and currently is, inducing infringement of the '893 Patent, in violation of 35 U.S.C. § 271(b).

157. Each Defendant has also infringed, and continues to infringe, claims of the '893 Patent by offering to commercially distribute, commercially distributing, making, and/or importing the Accused Instrumentalities, which are used in practicing the process, or using the systems, of the '893 Patent, and constitute a material part of the invention. Defendant knows the components in the Accused

Instrumentalities to be especially made or especially adapted for use in infringement of the '893 Patent, not a staple article, and not a commodity of commerce suitable for substantial noninfringing use. For example, the ordinary way of using the Accused Instrumentalities infringes the patent claims, and as such, is especially adapted for use in infringement. For another example, in the case of diskless My Cloud products, each end users must add one or more hard drives in order to make the product operable. Accordingly, each Defendant has been, and currently is, contributorily infringing the '893 Patent, in violation of 35 U.S.C. § 271(c).

158. As a result of Defendant's infringement of the '893 Patent, Plaintiff Data Scape is entitled to monetary damages in an amount adequate to compensate for each Defendant's infringement, but in no event less than a reasonable royalty for the use made of the invention by each Defendant, together with interest and costs as fixed by the Court.

#### **PRAYER FOR RELIEF**

WHEREFORE, Plaintiff Data Scape respectfully requests that this Court enter:

- a. A judgment in favor of Plaintiff that Defendants have infringed, either literally and/or under the doctrine of equivalents, the '581 Patent, the '929 Patent, the '537 Patent, and the '893 Patent (collectively, "asserted patents");
- b. A permanent injunction prohibiting Defendants from further acts of infringement of the asserted patents;
- c. A judgment and order requiring Defendants to pay Plaintiff its damages, costs, expenses, and prejudgment and post-judgment interest for its infringement of the asserted patents, as provided under 35 U.S.C. § 284;
- d. A judgment and order requiring Defendants to provide an accounting and to pay supplemental damages to Data Scape, including without limitation, prejudgment and post-judgment interest;